

In the claims:

1-32. (canceled)

33. (New) A power strip, comprising:

a housing having a first end and a second end;

at least one power outlet mounted on an exterior surface of the housing;

a power management circuit defined on an interior region of the housing, including:

a micro-controller coupled to the power supply and to a relay driver, the relay driver receiving control signals from the micro-controller;

an input power source sensor circuit is coupled intermediate the power supply and the micro-controller, to receive primary input power from the power supply and secondary input power from a secondary power source, whereby the input power source sensor circuit provides the primary input power to the micro-controller and if the primary input power fails, the input power source sensor circuit provides the secondary input power to the micro-controller; and

at least one relay coupled to the relay driver and to the at least one power outlet,

wherein the relay receives a control signal from the relay driver to actuate the relay to a conductive state to powering-on the power outlet and the relay receives another control signal from the relay driver to actuate the relay to a non-conductive state to powering-off the power outlet; and

an under voltage sensor coupled to the micro-controller and adapted to receive a predetermined voltage value from the power supply.

34. (New) The power strip of claim 33, wherein the at least one power outlet comprises a plurality of power outlets, the plurality of power outlets comprising a first group of power outlets and a second group of power outlets, the first group being coupled to the sensor circuit and the second group being coupled to the sensor circuit via the at least one relay.

35. (New) The power strip of claim 34, wherein the power strip further includes a plurality of communication ports.

36. (New) The power strip of claim 35, wherein the communication ports include a first communication port coupled to a communication-in circuit and a second communication port coupled to a communication-out circuit, the communication-in circuit and the communication-out circuit being further coupled the micro-controller.

37. (New) The power strip of claim 36, wherein the communication-in circuit includes the secondary power source.

38. (New) The power strip of claim 37, wherein the under voltage sensor is responsive to the predetermined voltage-value falling below a predetermined threshold value by providing a reset signal to the micro-controller.

39. (New) The power strip of claim 38, wherein the micro-controller is further coupled to a non-volatile memory device.

40. (New) The power strip of claim 39, wherein the micro-controller is further coupled to an audible alarm that can alert an operator that current on the input power line has exceeded a predetermined threshold value.

41. (New) The power strip of claim 40, wherein the micro-controller is further coupled to a mute button that which is actuated to silence the audible alarm.

42. (New) The power strip of claim 41, wherein the micro-controller is further coupled to an overload light-emitting-diode which is controlled to illuminate with a predetermined frequency to indicate an overload status of the input power line.

43. (New) The power strip of claim 42, wherein the second group of power outlets includes a plurality of light emitting diodes that can each be controlled to illuminate to indicate that an associated outlet is powered-on.

44. (New) The power strip of claim 33 further comprising a current sensor circuit that is adapted to receive input power over an input power line, the current sensor circuit being coupled to a power supply and to the at least one power outlet;

45. (New) A power distribution method comprising the steps of:
energizing an input power line to power-up a group of power outlets on a power distribution system;
initializing the power strip according to at least one system parameter or at least one operating configuration; and
controlling a relay to actuate to a conductive state in accordance with a predetermined sequence and a predetermined delay to sequentially power-on at least one of the power outlets in the group of power outlets on the power distribution system.

46. (New) The power distribution method of claim 45, wherein initializing according to a system parameter or an operating configuration includes the steps of:
programming a normal-threshold value into the power distribution system;
programming an overload-threshold value into the power distribution system;
programming an under-voltage threshold value into the power distribution system;
programming delays into the power distribution system, the delays being related to powering-on and powering-off the second group of power outlets; and
programming the sequence for which the second group of power outlets is powered-on and powered-off.

47. (New) The power distribution method of claim 46, wherein the method further includes:
sensing current on the input power line;
providing the sensed current to a micro-controller; and
determining if the sensed current is below the normal-threshold value,
wherein if the sensed current is below the normal-threshold value, the method further includes indicating a normal operation of the power distribution system.

48. (New) The power distribution method of claim 47, wherein the method further includes the steps of:

determining if the sensed current is above the normal-threshold value; and

determining if the sensed current is below the overload-threshold value,

wherein if the sensed current is above the normal-threshold value and below the overload-threshold value, the method further includes indicating a high current status of the power distribution system.

49. (New) The power distribution method of claim 48, wherein the method further includes the step of:

determining if the sensed current is above the overload-threshold value,

wherein if the sensed current is above the overload-threshold value, the method further includes indicating an alarm status of the power distribution system.

50. (New) The power distribution method of claim 49, wherein if the sensed current is above the normal-threshold value and below the overload-threshold value, the method further includes controlling a first group of predetermined relays to actuate to a non-conductive state to power-off a number of associated power outlets.

51. (New) The power distribution method of claim 50, wherein if the sensed current is above the overload-threshold value, the method further includes controlling a second group of predetermined relays to actuate to a non-conductive state to power-off a number of associated power outlets.

52. (New) The power distribution method of claim 51, wherein the method further includes:

controlling the plurality of relays to actuate to a non-conductive state in accordance with a predetermined sequence and a predetermined delay to sequentially power-off the second group of power outlets which are coupled to the relays; and

de-energizing the input power line defined on the power strip to power-off the first group of power outlets defined on the power strip.

53. (New) The power distribution method of claim 52, wherein powering-on the second group of power outlets further includes illuminating a plurality of light-emitting-diodes associated with the second group of power outlets.

54. (New) The power distribution method of claim 53, wherein the method further includes programming a maximum current draw value.

55. (New) A power distribution system, comprising:
a plurality of power strips, the power strips being mounted in an equipment rack, the equipment rack having a number of slots adapted to securely hold a number of pieces of equipment, each power strip including:
a housing having a first end and a second end;
at least one power outlet mounted on an exterior surface of the housing;
a power management circuit defined on an interior region of the housing, including:
a micro-controller coupled to the power supply and to a relay driver, the relay driver receiving control signals from the micro-controller; and
at least one relay coupled to the relay driver and to the at least one power outlet,
wherein the relay receives a control signal from the relay driver to actuate the relay to a conductive state to powering-on the power outlet and the relay receives another control signal from the relay driver to actuate the relay to a non-conductive state to powering-off the power outlet.

56. (New) The power distribution system of claim 55, wherein the power strips mounted in the equipment rack are daisy chained together to form a scalable power strip.

57. (New) The power distribution system of claim 55, further comprising a current sensor circuit adapted to receive input power over an input power line, the current sensor circuit being coupled to a power supply and to the at least one power outlet.